

CLAIMS:

We claim:

1. A process for preparing a mixed solvent adhesive solution comprising:

- a) mixing an alcohol and a polymer to form an adhesive solution;
- b) mixing a charge transporting molecule and an acetate to form a charge transport solution;
- c) adding the charge transport solution of (b) to the adhesive solution of (a) to form a mixed solvent solution;
- d) mixing an electrically conductive filler and a solvent to form a filled solvent solution; and
- e) mixing said filled solvent solution of (d) to said mixed solvent solution of (c) so as to form a mixed solvent adhesive solution.

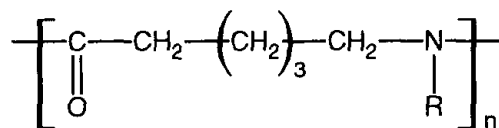
2. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said polymer is a polyamide.

3. A process for preparing a mixed solvent adhesive solution in accordance with claim 2, wherein said polyamide is an alcohol-soluble polyamide.

4. A process for preparing a mixed solvent adhesive solution in accordance with claim 3, wherein said alcohol-soluble polyamide comprises pendant groups selected from the group consisting of methoxy, ethoxy and hydroxy pendant groups.

5. A process for preparing a mixed solvent adhesive solution in accordance with claim 4, wherein said pendant groups are methylene methoxy pendant groups.

6. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said polyamide has the following general formula:



wherein R is selected from the group consisting of hydrogen, alkyl having from about 1 to about 20 carbons, alkoxy having from about 1 to about 20 carbons, alkyl alkoxy having from about 1 to about 20 carbons, and alkylene alkoxy having from about 1 to about 20 carbons, and wherein n is a number of from about 50 to about 1,000.

7. A process for preparing a mixed solvent adhesive solution in accordance with claim 6, wherein R is a methylene methoxy group.

8. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said alcohol is selected from the group consisting of methanol, ethanol, propanol, and butanol.

9. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said acetate is selected from the group consisting of methyl acetate, ethyl acetate, propyl acetate, and butyl acetate.

10. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said solvent is selected from the group consisting of alcohols and acetates.

11. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said charge transporting molecule is selected from the group consisting of bis(dihydroxy diethylamino) triphenyl methane, bis(diethylamino) triphenyl methane, dihydroxy tetraphenyl biphenylene diamine, and mixtures thereof.

12. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said electrically conductive filler is pyrolyzed polyacrylonitrile.

13. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said electrically conductive filler is selected from the group consisting of carbon fillers, metal oxide fillers, polymer fillers, quaternary ammonium salts, and mixtures thereof.

14. A process for preparing a mixed solvent adhesive solution in accordance with claim 12, wherein said electrically conductive filler is a carbon filler selected from the group consisting of carbon black, graphite, fluorinated carbon, and mixtures thereof.

15. A process for preparing a mixed solvent adhesive solution in accordance with claim 13, wherein said electrically conductive filler is a metal oxide filler selected from the group consisting of titanium dioxide, tin oxide, indium tin oxide, iron oxide, aluminum oxide, and mixtures thereof.

16. A process for preparing a mixed solvent adhesive solution in accordance with claim 13, wherein said electrically conductive filler is a polymer filler selected from the group consisting of polypyrrole, polythiophene, polyaniline and mixtures thereof.

17. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said process further comprises adding a nonionic surfactant along with the electrically conductive filler and a solvent in c).

18. A process in accordance with claim 17, wherein said nonionic surfactant is a fluorosurfactant.

19. A process for preparing a mixed solvent adhesive solution in accordance with claim 1, wherein said process further comprises subsequent to (c):

i) mixing a crosslinking agent to the mixed solvent adhesive solution formed in (c) so as to form a crosslinked adhesive in solution.

20. A process for preparing a mixed solvent adhesive solution in accordance with claim 19, wherein said crosslinking agent is selected from the group consisting of oxalic acid, p-toluene sulfonic acid, phosphoric acid, sulfuric acid, and mixtures thereof.

21. A process for preparing a mixed solvent adhesive solution comprising:

a) mixing an alcohol and a polymer to form an adhesive solution;

b) mixing a charge transporting molecule and a solvent other than alcohol so as to form a charge transport solution;

c) adding the charge transport solution of (b) to the adhesive solution of (a) to form a mixed solvent solution;

d) mixing an electrically conductive filler and a solvent to form a filled solvent solution; and

e) mixing said filled solvent solution of (d) to said mixed solvent solution of (c) so as to form a mixed solvent adhesive solution.

22. A process for preparing a mixed solvent adhesive solution comprising:

a) mixing an alcohol and a polyamide adhesive to form an adhesive solution;

b) mixing a charge transporting molecule and an acetate so as to form a charge transport solution;

c) adding the charge transport solution of (b) to the adhesive solution of (a) to form a mixed solvent solution;

d) mixing an electrically conductive filler and a solvent to form a filled solvent solution; and

e) mixing said filled solvent solution of (d) to said mixed solvent solution of (c) so as to form a mixed solvent adhesive solution.

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